

REMARKS

Claims 3-7 and 13-16 were pending in the application. Claims 3 and 13 have been amended to include the subject matter of dependent claims 7, 15 and 16, which have been canceled. As such, no new matter has been introduced and no new issues have been raised by way of this amendment to claims 3 and 13. Thus, claims 3-6, 13 and 14 are submitted for reconsideration at this time.

Prior Art Rejections

Claims 3-5, 7 and 13 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,066,388 to Van Kerrebrouck ("Van Kerrebrouck" hereafter). Claims 3-7, 13 and 14 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Van Kerrebrouck in view of U.S. Patent No. 5,554,831 to Matsukawa ("Matsukawa" hereafter). Independent claims 3 and 13 have been amended to include the subject matter of dependent claims 7, 15 and 16, which have been canceled. For at least the reasons set forth below, Applicants respectfully traverse the prior art rejections as follows.

At least one embodiment of the presently claimed invention is directed at an interior material including a sound absorbing material layer comprising a first polyester fiber (A) having a size smaller than 1 denier, and a second polyester fiber (C) including a component having a softening point lower than that of the first polyester fiber (A) by at least a temperature of 20 °C and a size ranging from 1 to 100 denier. The interior material further includes a first moldable layer laminated to the sound absorbing material layer and comprising a fourth polyester fiber (E) having a size ranging from 1 to 100 denier. According to this embodiment:

- (1) the first polyester fiber (A) having a size smaller than 1 denier is contained in an amount ranging from 65 to 95 parts by weight; and
- (2) the total thickness of the sound absorbing material layer and the total thickness of the moldable layer are in a ratio of a value ranging from 40 to 95 : a value ranging from 5 to 60.

With the above feature (1), a substantial amount of the first polyester fiber (A) having a size smaller than 1 denier, a relatively fine fiber, is used for the interior material. It is to be noted that using a finer fiber contributes to improved sound absorbing performance of the interior material. Therefore, using 65 to 95 parts by

weight of the first polyester fiber (A) having a size smaller than 1 denier largely improves the sound absorbing performance of the interior material.

With the above feature (2), the sound absorbing performance *and* the moldability of the interior material can be well balanced. More specifically, the sound absorbing material layer is intended to improve the sound insulating performance of the interior material, and therefore it is preferable to increase the thickness of the sound absorbing material as much as possible. In this regard, if the thickness is less than 40% of the total thickness of the interior material, the sound insulating performance may become too degraded. If the thickness is greater than 95% of the total thickness of the interior material, the sound insulating performance may be degraded. Hence, the moldable layer is intended to provide the moldability to the interior material. In this regard, if the thickness of the moldable layer is less than 5% of the total thickness of the interior material, sufficient moldability of the interior material cannot be maintained. However, if the thickness of the moldable layer exceeds 60% of the total thickness of the interior material, the sound insulating performance of the interior material may become too degraded. The presently cited art fails to disclose or suggest such an interior material that balances sound absorption and moldability within the claimed ranges.

Van Kerrebrouck fails to disclose or suggest the claimed ratio between the total thickness of the sound absorbing material layer and the total thickness of the moldable layer, which achieves an optimal balance between the sound absorbing performance and the moldability of the material. The January 2, 2003 Office Action on page 4 asserts that the inner layer of Van Kerrebrouck (allegedly analogous to the claimed sound absorbing layer) "may represent between 20 and 90% of the entire nonwoven [material]." First, this disclosure in Van Kerrebrouck is not a *thickness* measurement as claimed, but is rather a % by *weight* measurement. Secondly, this measurement compares the weight of the inner layer to the *entire* material weight, *not* the inner layer of Van Kerrebrouck to the *outer layer* of Van Kerrebrouck (allegedly analogous to the claimed moldable layer) as claimed.

Additionally, Van Kerrebrouck fails to disclose or suggest an amount of first polyester fiber (A) ranging from 65 to 95 parts by weight. The pending Office Action in note 4 asserts that Van Kerrebrouck teaches "the inner layer can comprise between 0 and 80% constructive fibers (column 3, lines 26-30)." The presently claimed range,

however, is from 65 to 95 parts by weight, and represents an optimal balance between the sound absorbing performance and the moldability of the material.

For at least the aforementioned reasons, Van Kerrebrouck fails to anticipate the presently claimed invention.

Matsukawa fails to rectify the noted deficiencies in Van Kerrebrouck. By way of example, in regards to the claimed amount of first polyester fiber (A) ranging from 65 to 95 parts by weight, Matsukawa discloses use of fibers having a relatively thick size of not less than 6 denier in an amount of 5-70% by weight. The Office Action asserts, however, that "[e]ven if the fibers having a denier not less than 6 were present in an amount of 0%, the amount of fibers having a denier less than 2 would still be 30%." See note 8 of the pending Office Action. A 30% amount of fibers having a denier less than 2, however, fails to anticipate the claimed range of 65 to 95 parts by weight. Thus, Matsukawa fails to rectify the deficiencies in Van Kerrebrouck.


In view of the aforementioned comments, withdrawal of the prior art rejections is solicited.

Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

By 

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